

Fish Consumption Advisory for Largemouth Bass from Gunlock Reservoir, Washington County, and Brown Trout from Mill Creek, Grand County

The Utah Department of Environmental Quality (UDEQ), Utah Department of Health (UDOH), Utah Department of Natural Resources (UDNR), Southeastern Utah District Health Department and the Southwest Utah Local Health Department are advising the public of elevated mercury in largemouth bass from Gunlock Reservoir in Washington County and brown trout in Grand County near Moab. The advisory recommends that adults limit their consumption of largemouth bass taken from Gunlock Reservoir to no more than two 8-ounce servings per month and three 8-ounce servings of brown trout from Mill Creek per month. Women who may become pregnant, pregnant women, nursing mothers, and young children should not eat more than one 4-ounce serving per month of fish from either location. This advisory is based on analyses of fish tissue taken from Gunlock Reservoir and Mill Creek.

Fillets from largemouth bass taken from Gunlock Reservoir and brown trout taken from Mill Creek in late June 2005 were tested for mercury levels. The data were assessed and the advisories issued based on risk-assessment methods developed by the Environmental Protection Agency (EPA). Results of the assessment show that consumption of largemouth bass from Gunlock Reservoir and brown trout from Mill Creek above the consumption advisory limit over a long period of time could result in an intake of mercury that could cause adverse health effects, particularly in young children and pregnant women. Although no known illnesses have been associated with consuming fish from the Gunlock Reservoir or Mill Creek, studies based on long-term consumption have identified mercury as a known toxic compound. It is important to note that the health risk associated with eating the contaminated fish is based on long-term consumption and not tied to eating fish occasionally. There is no health risk to other recreationists, including those swimming, boating, and waterskiing.

Fish consumption advisory signs will be posted at access points to Gunlock Reservoir and Mill Creek. In addition, information about the advisory will be distributed locally, and will be available at http://www.deq.utah.gov/issues/Mercury/fish_advisories.htm and each of the agencies' Internet sites. More information about the health effects of mercury can be found at: <http://www.atsdr.cdc.gov/tfacts46.html>. A map of Utah highlighting the sites where fish were tested for mercury and the tests results can be found at: http://www.waterquality.utah.gov/documents/mercury_sample_sites_5-17-05.pdf. 217 samples of fish tissue were taken throughout the state and only 18 samples had elevated mercury levels.

The agencies will continue to monitor contaminant levels of fish in these watersheds and will update the advisories, as needed, based on additional information.

Mercury is a naturally occurring element that is found in air, water and soil. It exists in several forms: elemental or metallic mercury, inorganic mercury compounds, and organic mercury compounds. When mercury is deposited in waterways, bacteria convert it to methylmercury. Methylmercury builds up in the tissue of fish, which may then be eaten by wildlife and people. Older, larger, predatory fish tend to have more mercury than younger, smaller fish because mercury bio-accumulates in fish over time. Mercury is tightly bound to the fish muscle tissue, there is no method of cooking or preparation that will remove or reduce mercury once it is in fish. This doesn't mean that you should stop eating fish. It is important to consider the benefits of eating fish as part of a balanced diet. Fish are a good source of readily digestible

protein. They are low in fat and sodium, and the unique types of fats found in fish are believed to provide cardiovascular benefits to humans. You can still get the benefits of eating fish by using moderation in how much you eat.

Women who may become pregnant, pregnant women, nursing mothers, and young children who consume largemouth bass from Gunlock Reservoir or brown trout from Mill Creek should not consume any other fish during the same week. The Food and Drug Administration (FDA) and the EPA are advising women who may become pregnant, pregnant women, nursing mothers, and young children to avoid some types of fish and to only eat fish and shellfish that are lower in mercury. The types of fish to avoid include Shark, Swordfish, King Mackerel or Tilefish because they contain high levels of mercury. Up to 12 ounces (2 average meals) a week of a variety of fish and shellfish can be eaten that are lower in mercury. The most commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock and catfish. Another commonly eaten fish, albacore ("white") tuna has more mercury than canned light tuna. Up to 6 ounces (one average meal) of albacore tuna can be eaten per week.

The Division of Wildlife Resources says the amount of fishing at Gunlock and Mill Creek, and the number of fish taken by anglers, is very low.

Gunlock:

Based on a creel census survey done in the mid-1980s (where anglers are checked to see how many fish they've caught), and more recent data from conservation officers checking anglers at Gunlock, the DWR estimates about 2,000 angler days, or trips, are made to Gunlock each year. Even though the population in southern Utah has grown in recent years, the development of fisheries at Quail Lake and Sand Hollow reservoirs has drawn anglers away from Gunlock and has probably reduced fishing pressure at the reservoir from what it was in the mid-1980s.

Based on fishing pressure, past creel surveys and fishing regulations, the DWR estimates that anglers keep less than 500 largemouth bass annually at Gunlock. With a relatively restrictive slot limit at the reservoir (anglers must release all bass between 10 and 20 inches long), the harvest of largemouth bass is limited to a few trophy-sized fish; small bass caught and kept by anglers who are primarily fishing for bluegills and crappies; and illegal harvest. Anglers specifically targeting largemouth bass (i.e. bass fishing clubs) generally release all the bass they catch, regardless of how big the fish is.

Where Gunlock anglers come from varies. John Schijf, the DWR conservation officer for the Gunlock area, estimates that 80 percent of the anglers fishing for largemouth bass are from the local area, with most of the remaining 20 percent coming from Nevada. For bluegills and crappies, Schijf estimates that 80 percent of the anglers are from Nevada (mostly from the Las Vegas area) and the remainder is from the local area.

Few anglers travel from other parts of Utah to fish at Gunlock – almost all of the Utah anglers are from the local area.

Mill Creek:

The Division of Wildlife Resources has not done any creel surveys on this small creek, but DWR biologists believe both the number of brown trout in the creek and the amount of fishing pressure it receives are very small.

DWR biologists say most of the people who fish the creek are local residents from the Moab area.

This investigation was conducted in cooperation with state and local agencies. Contacts for each agency follow:

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